

CLAIMS

1. Method for generating data to be used for assessing cognitive or sensomotor capabilities or capacities of a test person, characterized in that measuring samples which are collected by a per se known measuring means and image cerebral activities of the test person, are registered during time frames which are synchronized with a presentation of a succession of test situations to the test person, that, from the collected measuring samples, relevant changes in cerebral activity are traced and located in the brain of the test person, that the relevant activity changes are assigned to a plurality of groups, wherein each group contains the relevant activity changes located in a predetermined cerebral region, that the groups of relevant activity changes are interrelated, and that data defining the relation between the groups is prepared for the assessment.
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- 15 2. Method according to claim 1, characterized in that, the step of tracing and locating relevant activity changes, the step of assigning relevant activity changes to groups and the step of interrelating the groups are carried out for the sum of the measuring samples registered in all the time frames, or for each individual time frame, or for a group of time frames each.
- 20 3. Method according to claim 1 or 2, characterized in that the time frames for registering of measuring samples are synchronized with the succession of test situations in such a manner that a time frame begins at the start of each test situation of the succession.

4. Method according to claim 3, characterized in that, the each time frame has a length of between 0.1 and 3000 seconds.
5. Method according to any one of claims 1 to 4, characterized in that the test situations are problems which are solvable using a specific experience and which are presented visually or acoustically.
6. Method according to any one of claims 1 to 4, characterized in that the test situations are images or other situations aimed at a possible experience of the test person.
7. Method according to any one of claims 1 to 6, characterized in that the relevant activity changes are traced by filtering and/or by an admittance test.
8. Method according to any one of claims 1 to 6, characterized in that the cerebral regions of the step of assigning relevant activity changes to groups are the cerebral region of the frontal, occipital and parietal lobes and the cerebral region of the temporal lobe, the hippocampus, and the limbic system.
- 15 9. Method according to any one of claims 1 to 8, characterized in that the step of interrelating the groups of relevant activity changes comprises the step of determining a proportion of numbers of relevant activity changes in the groups.
10. Method according to any one of claims 1 to 9, characterized in that the step of preparing the data for the assessment comprises presenting the data describing

the group relation visually or acoustically together with experimentally determined assessment grades, comparative data and/or threshold values.

11. Method according to any one of claims 1 to 10, characterized in that the measuring samples are collected by magnetic encephalography or electro-encephalography and that the relevant activity changes are potential sources of the frequency range of 4 to 80 hertz and with a goodness of fit of more than 90%.
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12. Method according to claim 11, characterized in that the measuring samples are recorded with a frequency of 10 to 5000 hertz.
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13. Data processing system for generating data to be used for assessing cognitive or sensomotor capabilities or capacities of a test person, characterized in that the system comprises an interface for input of measuring samples collected by a per se known method, the measuring samples imaging cerebral activities of the test person, as well as a means for presenting a succession of different test situations to the test person, a means for synchronizing the succession of test situations with time frames in which measuring samples are registered, a means for tracing and locating relevant activity changes from the registered measuring samples, a means for assigning the relevant activity changes to a plurality of groups based on the location of the activity changes in a plurality of different predetermined cerebral regions, a means for interrelating the groups of relevant activity changes, and a means for preparing data describing the relation between the groups for the assessment.
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14. Data processing system according to claim 13, characterized in that the means for tracing and locating relevant activity changes comprises a means for filtering and/or a means for subjecting the traced activity changes to an admittance test.
- 5 15. Data processing system according to any one of claims 13 or 14, characterized in that it further comprises a display screen or a loudspeaker for visual or acoustic presentation of the succession of test situations and/or for the step of preparing the data reflecting the group relation for the assessment.
- 10 16. Storage medium with a program code stored within, which storage medium, when inserted into a computer, induces the computer to perform a method according to any one of claims 1 to 12.
17. Use of the method according to any one of claims 1 to 12 for the assessment of test persons with regard to their ability to make use of their experience.
18. Use of the method according to any one of claims 1 to 12 as a lie detector.